

# CD Radio Cassette-Corder

**Operating Instructions** 

CFD-Z500 CFD-Z501 CFD-Z550

## Warning

To prevent fire or shock hazard, do not expose the player to rain or moisture.





This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

#### CAUTION

The use of optical instruments with this product will increase eye hazard.

#### Warning

Do not install the appliance in a confined space, such as a bookcase or built-in cabinet.

#### For customers in Canada

To prevent electric shock, match wide blade of plug to wide slot, fully insert.

#### Information

#### For customers in the United States

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- —Reorient or relocate the receiving antenna.
- —Increase the separation between the equipment and receiver.
- —Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- —Consult the dealer or an experienced radio/TV technician for help.

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

#### Owner's Record

The model number is located at the rear of the CD radio cassette-corder and the serial number is located in the battery compartment.

Record these numbers in the spaces provided below. Refer to these numbers whenever you call upon your Sony dealer regarding this product.

Model No. <sub>-</sub>	
Serial No	

#### About This Manual

The instructions in this manual are for the CFD-Z500, CFD-Z501 and CFD-Z550. Before you start reading, check your model number. The CFD-Z550 is the model used for illustration purposes.

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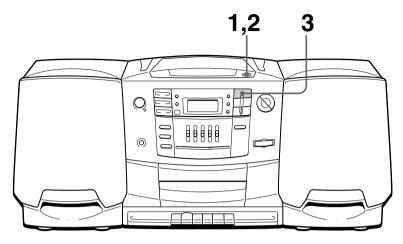
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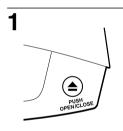
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# Playing a CD

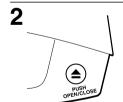


For hookup instructions, see pages 23 – 25.



Push ♠ PUSH OPEN/CLOSE down to open the CD compartment and place the CD on the CD compartment.





Close the lid of the CD compartment.



3



Press ►II.

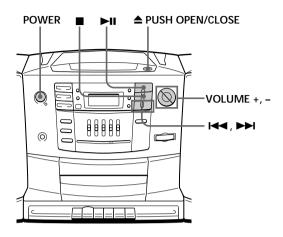
The player turns on (direct power-on) and plays all the tracks once.

Display



Track number Playing time

## Use these buttons for additional operations

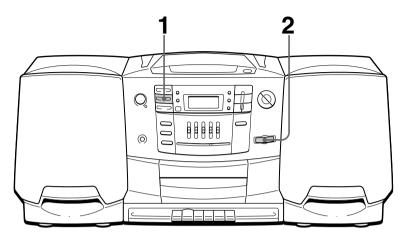


#### To **Press** adjust the volume VOLUME +, - (VOL +, on the remote, CFD-Z550 only) stop playback pause playback ►II ( II on the remote, CFD-Z550 only). Press the button again to resume play after pause. **▶**▶ go to the next track go back to the previous track **◄** ▲ PUSH OPEN/CLOSE remove the CD turn on/off the player **POWER**

#### Tip

Next time you want to listen to a CD, just press ►II. The player turns on automatically and starts playing the CD.

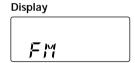
# Listening to the radio

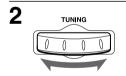


For hookup instructions, see pages 23 – 25.

1 • RADIO BAND

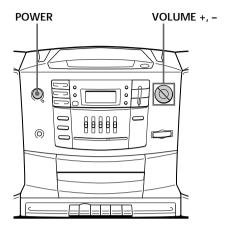
Press RADIO BAND (BAND on the remote, CFD-Z550 only) until the band you want appears in the display (direct power-on).





Turn TUNING to tune in the station you want.
If the received FM stereo is weak, the reception becomes monaural.

# Use these buttons for additional operations



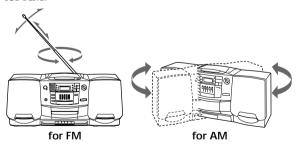
То	Press
adjust the volume	VOLUME +, - (VOL +, - on the remote, CFD-Z550 only)
turn on/off the radio	POWER

## Tip N

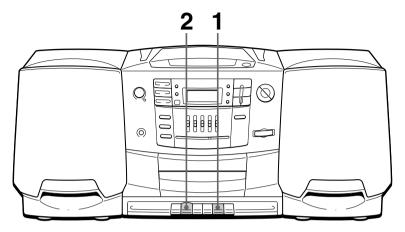
Next time you want to listen to the radio, just press RADIO BAND (BAND on the remote, CFD-Z550 only). The player turns on automatically and starts playing the previous station.

# To improve broadcast reception

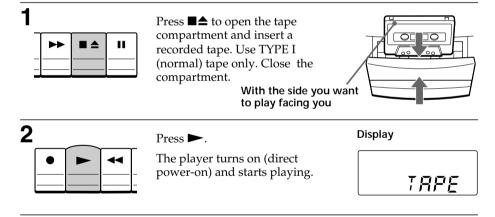
Reorient the antenna for FM. Reorient the player itself for AM.



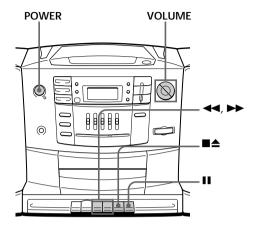
# Playing a tape



For hookup instructions, see pages 23 – 25.



## Use these buttons for additional operations

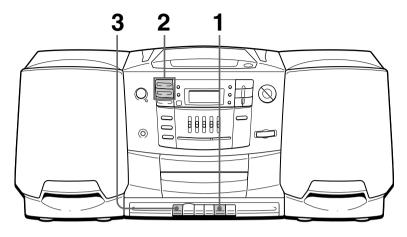


То	Press
adjust the volume	VOLUME +, - (VOL +, - on the remote, CFD-Z550 only)
stop playback	
fast-forward or rewind the tape	<b>▶</b> or <b>◄</b>
pause playback	Press the button again to resume play after pause.
eject the cassette	
turn on/off the player	POWER

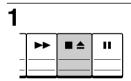
### Tip

Next time you want to listen to a tape, just press ►. The player turns on automatically and starts playing the tape.

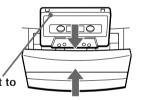
# Recording on a tape



For hookup instructions, see pages 23 – 25.



Press ■ to open the tape compartment and insert a blank tape. Use TYPE I (normal) tape only.



With the side you want to record on facing you

2

Select the program source you want to record.



To record from the CD player: insert a CD (see page 4) and press CD.



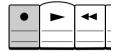
To record from the radio: tune in the station you want (see page 6).







3



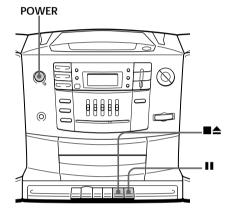
Start recording.

Press  $\bullet$  ( $\blacktriangleright$  is depressed automatically).

#### Tips

- Adjusting the volume or the audio emphasis (see pages 26 and 27) will not affect the recording level.
- For the best results, use the AC power as a power source.

## Use these buttons for additional operations



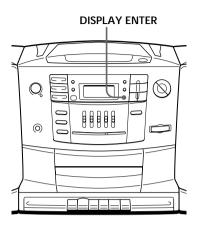
То	Press
stop recording	
pause recording	Press the button again to resume recording.
turn on/off the player	POWER

To erase a recording, proceed as follows:

- 1 Insert a tape whose recording you want to erase into the tape deck.
- 2 Press TAPE.
- 3 Press ●.

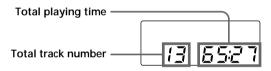
# Using the display

You can check information about the CD using the display.



# Checking the total track numbers and playing time

Press DISPLAY ENTER in stop mode.



# Checking the remaining time

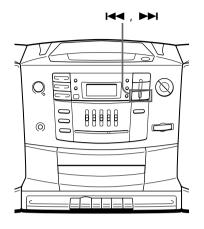
Press DISPLAY ENTER while playing a CD.

To display	Press DISPLAY ENTER
the current track number and the remaining time on the current track*	once
the number of tracks left and the remaining time on the CD	twice
the current track number and playing time	three times

<sup>\*</sup> For a track whose number is more than 20 the remaining time appears as "—  $\div$ —".

# Locating a specific point in a track

You can quickly find a specific point in a track while playing a CD. You can also locate any track using the number buttons on the remote (CFD-Z550 only).



To locate	Press
a point while listening to the sound	▶► (forward) or ► (backward) while playing and hold down until you find the point
a point while observing the display	▶►I (forward) or I◀◀ (backward) in pause and hold down until you find the point
a specific track directly (CFD-Z550 only)	number button of the track on the remote

#### Note

CFD-Z550 only:
You cannot locate a specific track if "SHUF" or "PGM" is lit in the display. Turn off the indication by pressing ■.

#### Tip

CFD-Z550 only:

When you locate a track numbered over 10, press >10 first, then the corresponding number buttons.

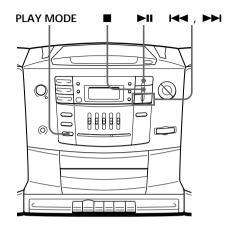
Example:

To play track number 23, press >10 first, then 2 and 3.

# Playing tracks repeatedly

(Repeat Play)

You can play tracks repeatedly in normal, shuffle or program play modes (see pages 15 and 16).



# On the remote (CFD-Z550 only)

- Use MODE instead of PLAY MODE and
   instead of ►II.
- When you have selected "REP 1", select the track by pressing the number buttons.

1 Press  $\blacksquare$ .

"Cd" appears in the display.

**2** Proceed as follows.

To repeat	Do this
a single track	1 Press PLAY MODE until "REP 1" appears.
	2 Press ◄ or ► to select the track that you want to repeat.
	3 Press ►II.
all the tracks	1 Press PLAY MODE until "REP ALL" appears.
	2 Press ►II.
tracks in random order	1 Press PLAY MODE until "SHUF REP" appears.
	2 Press ►II.
programmed tracks	1 Press PLAY MODE until "PGM REP" appears.
	2 Program tracks (see step 3 on page 16).
	3 Press ►II.

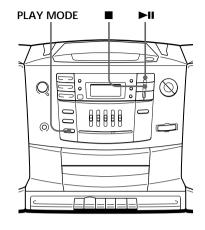
# To cancel Repeat Play

Press PLAY MODE until "REP" disappears from the display.

# Playing tracks in random order

(Shuffle Play)

You can play tracks in random order.



On the remote (CFD-Z550 only)

Use MODE instead of PLAY MODE and ► instead of ► II.

**1** Press ■.

"Cd" appears in the display.

- **2** Press PLAY MODE until "SHUF" appears in the display.
- **3** Press ►II to start shuffle play.

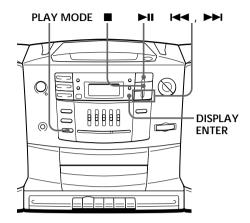
# To cancel Shuffle Play

Press PLAY MODE until "SHUF" disappears from the display.

# Creating your own program

(Program Play)

You can make a program of up to 20 tracks in the order you want them to be played.



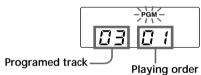
# On the remote (CFD-Z550 only)

- 1 Press ■.
- 2 Press MODE until "PGM" appears in the display.
- 3 Press the number buttons for the tracks you want to program in the order you want.
- 4 Press ►.

**1** Press **■**.

"Cd" appears in the display.

- **2** Press PLAY MODE until "PGM" appears in the display.
- **3** Press **►** or **►** then press DISPLAY ENTER for the tracks you want to program in the order you want.



**4** Press ►II to start program play.

#### Tips

- You can play the same program again, since the program is saved until you open the disc compartment.
- You can record your own program. After you have created the program, insert a blank tape into the tape deck and press of to start recording.

## To cancel Program Play

Press PLAY MODE until "PGM" disappears from the display.

# To check the order of tracks before play

Press DISPLAY ENTER.

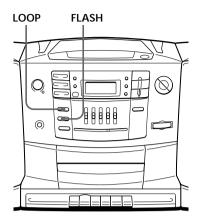
Every time you press the button, the track number appears in the programed order.

## To change the current program

Press once if the CD is stopped and twice if the CD is playing. The current program will be erased. Then create a new program following the programing procedure.

# Enjoying sound effects (LOOP/FLASH)

You can repeat part of a CD (LOOP) and can "flash" the CD sound (FLASH) during playback.



- **1** Play a CD.
- **2** Press and hold LOOP or FLASH at the point you want to start the function.

То	Press and hold
repeat a selected part of a CD	LOOP
"flash" the CD sound	FLASH

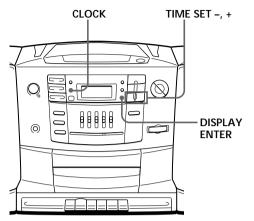
# To cancel the LOOP or FLASH function

Release the button.

The player returns to normal play.

# Setting the clock

"--:-" indication appears in the display until you set the clock.



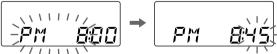
#### Tip

The time display system of this player is the 12-hour system: AM12:00 = midnight PM12:00 = noon Before you set the clock, connect the power source (pages 23 - 25).

1 Press and hold CLOCK for 2 seconds until the hour digits flash.

**2** Press TIME SET + or – until you set the current hour. Then press DISPLAY ENTER.

The minute digits flash. Set the minutes by pressing TIME SET + or – until the correct minute is displayed.

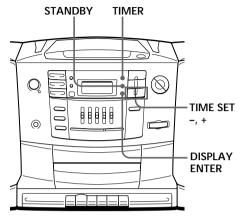


**3** Press DISPLAY ENTER.

The clock starts from 00 seconds.

# Waking up to music

You can wake up to music or a radio program at a preset time. Make sure you have set the clock ("Setting the clock" on page 19).



Before you begin, make sure the  $\bigcirc$  (clock) indication is not lit in the display. If it is lit, press STANDBY.

**1** Prepare the music source you want to play.

To play	Do this	
a CD	Insert a CD.	
the radio	Tune in a station	

**2** Press TIMER.

The ② (clock) and the music source ("Cd" or "RAdIO") flash.

- **3** Select the music source ("Cd" or "RAdIO") by pressing TIME SET + or –, then DISPLAY ENTER.
- **4** Set the timer to the hour you want the music to start by pressing TIME SET + or –, then DISPLAY ENTER.

Set the minutes by pressing TIME SET + or –, then DISPLAY ENTER.

**5** Set the timer to the hour and the minutes you want the music to go off. (Do as step 4.)

**6** Set the volume by pressing TIME SET + or –, then DISPLAY ENTER.

#### Tips

- To exit the standby mode, press STANDBY to make the ⊕ indication disappear from the display.
- The preset settings remain until you reset them.

## **7** Press STANDBY.

The ⊕ indication lights up; the player enters the standby mode.

At the preset time, the power will go on, and the music will play. Then the power will go off at the preset time, and the player will enter into the standby mode.

## To check/change the waking up timer settings

Press TIMER, then DISPLAY ENTER. Each time you press DISPLAY ENTER, a stored setting is displayed in the set order. To change the setting, display the setting you want to change and re-enter it.

# To use the player before a timer playback starts

Just turn on the player, and then you can use it.

If you turn off the player before the preset time, timer playback will start at the preset time.

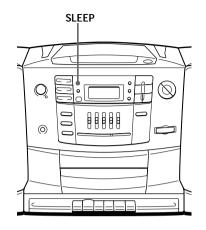
In case of the radio, however, if you listen to the station which is different from the one you tuned in in step 1 on page 20, you will hear that station at the preset time. Make sure to tune in the station you want to listen to before you turn off the player.

## To stop play

Press POWER to turn off the power.

# Falling asleep to music

You can set the player to turn off automatically after 10, 20, 30, 60, 90, and 120 minutes, allowing you to fall asleep while listening to music.



### Tips

- You can fall asleep and wake up to different music. Set the waking up timer first (see page 20), turn on the power, and then set the sleeping timer. However, you cannot store different radio stations.
- You can set different volume for the waking up timer and the sleeping timer. For instance, you can sleep at lower volume and wake up at higher volume.

#### Note

When you are playing a tape using this function: If the tape length of one side is longer than the set time, the player will not go off until the tape reaches the end.

- **1** Play the music source you want.
- **2** Press SLEEP to display "SLEEP".
- **3** Press SLEEP to select the minutes until the player goes off automatically.

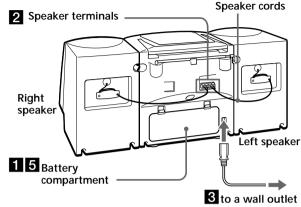
Each time you press the button, the indication changes as follows:

# To cancel the sleep function

Press POWER to turn off the power.

# Hooking up the system

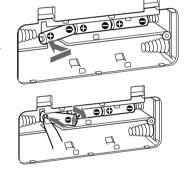
Make sure you turn off the power before making any connections.



# 1 Inserting the back-up batteries

Insert three size AA (R6) batteries (not supplied) into the battery compartment. These batteries work to save the memory data.

To remove the batteries, push the **•** side.

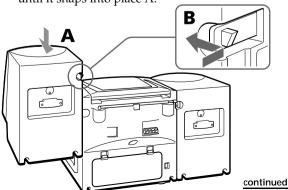


#### **Tips**

- To detach the speakers, unlock speaker (see B on the diagram) and slide the speaker box all the way up and away from the player.
- Connect the speakers for this unit only to the speaker terminals of this unit. If you connect any other speakers or equipment, malfunction may occur.

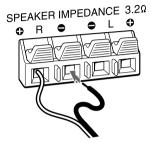
# 2 Hooking up the speakers

Align the grooves and slide the speaker box down until it snaps into place A.



## Hooking up the system (continued)

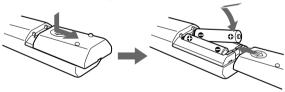
**2** Connect the black wires to (–) minus and the red wires to (+) plus terminals; the right speaker wires to the R and the left speaker wires to the L terminals.



# 3 Connecting the AC power cord

Insert one end of the supplied AC power cord to the AC IN socket located at the rear of the player, and the other end to the wall outlet.

# 4 Inserting batteries into the remote (CFD-Z550 only)



Insert two size AA (R6) batteries (not supplied)

## Replacing batteries

With normal use, the batteries should last for about six months. When the remote no longer operates the player, replace all the batteries with new ones.

#### Note

CFD-Z550 only:

When you operate the player on batteries, you cannot turn on the player using the remote.

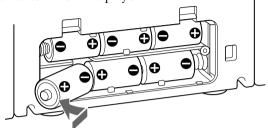
#### Tip

Replace the batteries when the OPR/BATT indicator dims or when the player stops operating. Replace all the batteries with new ones. Before you replace the batteries, be sure to take out the CD from the player.

# 5 Using the player on batteries

Insert six size D (R20) batteries (not supplied) into the battery compartment.

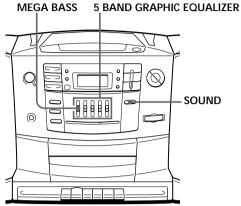
To use the player on batteries, disconnect the AC power cord from the player.



# Selecting the audio emphasis

(SOUND/MEGA BASS/5 BAND GRAPHIC EQUALIZER)

You can adjust the audio emphasis of the sound you are listening to.



## Selecting the sound characteristic

Press the SOUND button repeatedly to select the sound characteristic you want.

Choose	For
MANUAL	adjusting the audio emphasis with 5 BAND GRAPHIC EQUALIZER (see page 27).
ROCK	Rock'n'roll: powerful, clean sounds
POP	Popular music: light, bright sounds
JAZZ	Jazz: clear bass audio and powerful sounds of instruments such as piano or guitar
CLUB	Dance music: extensive, powerful vocals and dynamic instrumental sounds

#### Note

When adjusting the 5 BAND GRAPHIC EQUALIZER, be sure to select MANUAL. The graphic equalizer will not work in any other position.

If you have selected MANUAL on page 26, slide 5 BAND GRAPHIC EQUALIZER to select the audio emphasis you want.

Frequency coverage	Slide the control up (to MAX/+10)	Slide the control down (to MIN/-10)	
MEGA BASS	to increase heavy bass sound	to decrease heavy bass sound	
400 Hz	to emphasize speaking voice, middle frequencies of instrumental music	to de-emphasize speaking voice, middle frequencies of instrumental music	
1 kHz	to provide more presence of vocals	to provide less presence of vocals	
4 kHz	to heighten overall brightness of sound	to lessen overall brightness of sound	
10 kHz	to increase high treble sounds	to decrease high treble sounds or reduce high frequency noise/tape hiss	

# **Precautions**

### On safety

- As the laser beam used in the CD player section is harmful to the eyes, do not attempt to disassemble the casing. Refer servicing to qualified personnel only.
- Should any solid object or liquid fall into the player, unplug the player, and have it checked by qualified personnel before operating it any further.

### On power sources

- For AC operation use the supplied AC power cord; do not use any other type.
- The player is not disconnected from the AC power source (mains) as long as it is connected to the wall outlet, even if the player itself has been turned off.
- Unplug the player from the wall outlet when it is not to be used for an extended period of time.
- For battery operation, use six size D (R20) batteries.
- When the batteries are not to be used, remove them to avoid damage that can be caused by battery leakage or corrosion.
- The nameplate indicating operating voltage, power consumption, etc. is located at the rear.

#### On placement

- Do not leave the player in a location near heat sources, or in a place subject to direct sunlight, excessive dust or mechanical shock.
- Do not place the player on an inclined or unstable place.
- Do not place anything within 10 mm of the side of the cabinet. The ventilation holes must be unobstructed for the player to operate properly and prolong the life of its components.
- If the player is left in a car parked in the sun, be sure to choose a location in the car where the player will not be subjected to the direct rays of the sun.
- Since a strong magnet is used for the speakers, keep personal credit cards using magnetic coding or springwound watches away from the player to prevent possible damage from the magnet.

### On operation

- If the player is brought directly from a cold to a warm location, or is placed in a very damp room, moisture may condense on the lens inside the CD player section. Should this occur, the player will not operate properly. In this case, remove the CD and wait about an hour for the moisture to evaporate.
- If the player has not been used for a long time, set it in the playback mode to warm it up for a few minutes before inserting a cassette.

If you have any questions or problems concerning your player, please consult your nearest Sony dealer.

#### Notes on CDs

 Before playing, clean the CD with a cleaning cloth. Wipe the CD from the center out.

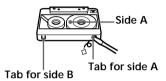


- Do not use solvents such as benzine, thinner, commercially available cleaners or anti-static spray intended for vinyl LPs.
- Do not expose the CD to direct sunlight or heat sources such as hot air ducts, nor leave it in a car parked in direct sunlight as there can be a considerable rise in temperature inside the car.
- Do not stick paper or sticker on the CD, nor scratch the surface of the CD.
- After playing, store the CD in its case.

If there is a scratch, dirt or fingerprints on the CD, it may cause tracking error.

#### Notes on cassettes

Break off the cassette tab from side A
or B to prevent accidental recording. If
you want to reuse the tape for
recording, cover the broken tab with
adhesive tape.



 The use of a cassette with more than 90 minutes of play time is not recommended except for long, continuous recording or playback.

# **Troubleshooting**

	Symptom	Remedy
General	The power is not on.	<ul> <li>Connect the AC power cord to a wall outlet securely.</li> <li>You cannot turn on the player with the remote when you operate the player on batteries (CFD-Z550 only).</li> </ul>
	The power is not on, and "bAttErY" and "CHECK" are displayed alternately.	<ul> <li>Make sure the batteries are inserted correctly.</li> <li>Replace all the batteries with new ones if they are weak.</li> </ul>
	There is no audio.	<ul> <li>Make sure the function you want to use appears in the display window.</li> <li>Adjust the volume.</li> <li>Unplug the headphones when listening through speakers.</li> </ul>
	Noise is heard.	<ul> <li>Someone is using a portable telephone or other equipment that emits radio waves near the player. → Move the portable telephone, etc., away from the player.</li> </ul>
CD Player	"no disc" lights in the display even when a CD is in place.	• Insert the CD with the label surface up.
	The CD does not play.	<ul> <li>Make sure that the CD compartment is closed.</li> <li>Place the CD with the label surface up.</li> <li>Clean the CD.</li> <li>Take out the CD and leave the CD compartment open for about an hour to dry moisture condensation.</li> <li>Make sure "Cd" appears in the display.</li> </ul>
	The sound drops out.	<ul> <li>Reduce the volume.</li> <li>Clean the CD, or replace it if the CD is badly damaged</li> <li>Place the player in a location free from vibration.</li> </ul>
Radio	The audio is weak or has poor quality.	<ul> <li>Replace all the batteries with new ones if they are weak.</li> <li>Move the player away from the TV.</li> <li>If you are using the remote while listening to AM radio, noise may be heard. This is unavoidable.</li> </ul>
	The picture of your TV becomes unstable.	• If you are listening to an FM program near the TV with an indoor antenna, move the player away from the TV.

	Symptom	Remedy		
	The tape does not move when you press an operation button.	Close the cassette compartment securely.		
Tape Player	The ● button does not function/ The tape does not play.	<ul><li> Make sure the safety tab on the cassette is in place.</li><li> Make sure "TAPE" appears in the display.</li></ul>		
	The tape does not erase completely.	<ul> <li>Clean the erasing head (see page 32.)</li> <li>Replace all the batteries with new ones if they are weak.</li> <li>The source which was recorded on TYPE II (high position) or TYPE IV (metal) tape using this unit is being played. Record on TYPE I (normal) tape and play.</li> </ul>		
	The tape does not record.	<ul> <li>Make sure the tape is inserted properly.</li> <li>Make sure the safety tab of the cassette is in place.</li> </ul>		
	The audio is weak/The audio quality is poor.	<ul> <li>Clean the heads, pinch rollers and capstans (See page 32).</li> <li>Demagnetize the heads using a demagnetizer (see page 32).</li> </ul>		
	The sound is distorted.	The TYPE II (high position) or TYPE IV (metal) tape is being used. Use TYPE I (normal) tape only.		
Timer	The timer does not operate.	<ul> <li>Make sure the time on the clock is correct.</li> <li>Check to see if the AC power had been cut off.</li> <li>Make sure the (clock) indication is displayed.</li> </ul>		
Remote (CFD-Z550 only)	The remote does not function.	<ul> <li>Replace all the batteries in the remote with new ones if they are weak.</li> <li>Make sure that you are pointing the remote at the remote sensor on the player.</li> <li>Remove any obstacles in the path of the remote and the player.</li> <li>Make sure the remote sensor is not exposed to strong light such as direct sunlight or fluorescent lamp light.</li> <li>Move closer to the player when using the remote.</li> </ul>		

After trying the above remedies, if the player still does not function properly, unplug the AC power cord and remove all the batteries. After all the indications in the display disappear, plug the power cord and insert the batteries again. If the problem persists, please consult your nearest Sony dealer.

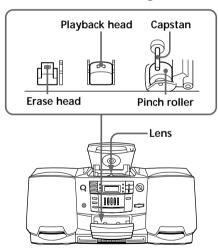
# **Maintenance**

### Cleaning the lens

If the lens becomes dirty, it may cause a skipping of sound during CD operation. Clean with a commercially available blower.

# Cleaning the tape heads and tape path

Wipe the heads, the pinch rollers and the capstans with a cleaning swab slightly moistened with cleaning fluid or alcohol after every 10 hours of operation for optimum playback and recording quality. To make the best possible recording, however, we recommend that you clean all surfaces over which tape travels before each recording.



After cleaning, insert a tape when the areas cleaned are completely dry.

### Demagnetizing the tape heads

After 20 to 30 hours of use, enough residual magnetism will have built up on the tape heads to begin to cause loss of high frequency sound and hiss. At this time, you should demagnetize the heads and all metal parts in the tape path with a commercially available tape head demagnetizer.

### Cleaning the cabinet

Clean the cabinet, panel and controls with a soft cloth slightly moistened with a mild detergent solution. Do not use any type of abrasive pad, scouring powder, or solvent, such as alcohol or benzine.

# **Specifications**

#### **AUDIO POWER SPECIFICATIONS**

POWER OUTPUT AND TOTAL HARMONIC DISTORTION

With 3.2-ohm loads, both channel driven from 150 - 10,000 Hz; rated 1.6 W per channel-minimum RMS power, with no more than 10 % total harmonic distortion in AC operation.

# Other Specifications CD player section

System

Compact disc digital audio system

Laser diode properties

Material: GaAlAs

Wave length: 780 nm

Emission duration: Continuous

Laser output: Less than 44.6 µW

(This output is the value measured at a distance of about 200 mm from the objective lens surface on the optical pick-up block with 7 mm aperture.)

Spindle speed

200 r/min (rpm) to 500 r/min (rpm) (CLV)

Number of channels

2

Frequency response

20 - 20,000 Hz +1/-2 dB

Wow and flutter

Below measurable limit

#### Radio section

Frequency range

FM: 87.6 - 108 MHz

AM: 530 - 1,710 kHz

Antennas

FM: Telescopic antenna

AM: Built-in ferrite bar antenna

#### Cassette-corder section

Recording system

4-track 2 channel stereo

Fast winding time

Approx. 120 s (sec.) with Sony cassette C-60

Frequency response

TYPE I (normal): 80 - 12,500 Hz

#### General

Speaker

Full range: 10 cm (4 in.) dia., 3.2 ohms, cone type (2)

Outputs

Headphones jack (stereo minijack)

For 16 - 68 ohms impedance headphones

Power output (excluding US model)

2.3 W + 2.3 W (at 3.2 ohm, 10 % harmonic

distortion in AC operation)

Power requirements

For CD radio cassette-corder:

120 V AC, 60 Hz

9 V DC, 6 size D (R20) batteries

For memory back-up:

4.5 V DC, 3 size AA (R6) batteries

For remote controller (CFD-Z550 only):

3 V DC, 2 size AA (R6) batteries

Power consumption

AC 15 W

Battery life

For CD radio cassette-corder:

FM recording					
Sony R20P:	approx. 13.5 h				
Sony alkaline LR20:	approx. 20 h				
Tape playback					
Sony R20P:	approx. 7.5 h				
Sony alkaline LR20:	approx. 15 h				
CD playback					
Sony R20P:	approx. 2.5 h				
Sony alkaline LR20:	approx. 7 h				

For memory back-up: approx. 1 year

Dimensions

Approx.  $650 \times 265 \times 250 \text{ mm (w/h/d)}$ 

 $(25 \% \times 10 \% \times 9 \% \text{ inches})$  (incl. projecting parts)

Mass

Approx. 7.15 kg (15 lb. 12 oz) (incl. batteries)

Supplied accessory

AC power cord (1)

Remote controller (1) (CFD-Z550 only)

Design and specifications are subject to change without notice.

#### Optional accessories

Sony MDR headphone series

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